1 **3.3.3** AIR QUALITY

		Less Than		
	Potentially	Significant	Less Than	
	Significant	With Mitigation	Significant	No
Issues	Impact	Incorporated	Impact	Impact
	•	•	•	

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. *Would the project:*

(a)	Conflict with or obstruct implementation of the applicable air quality plan?		\boxtimes	
(b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	\boxtimes		
(c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		\boxtimes	
(d)	Expose sensitive receptors to substantial pollutant concentrations?			
(e)	Create objectionable odors affecting a substantial number of people?		\boxtimes	
(f)	Conflict with the State goal of reducing greenhouse gas emissions in California to 1990 levels by 2020, as set forth by AB 32, California Global Warming Solutions Act of 2006?			

1 Environmental Setting

2 Air Quality

- 3 Criteria air pollutants are a group of pollutants for which Federal or State regulatory
- 4 agencies have adopted ambient air quality standards. Criteria air pollutants include
- 5 ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate
- 6 matter (both PM₁₀ and PM_{2.5}), and lead. Most of the criteria pollutants are directly
- 7 emitted. Ozone, however, is a secondary pollutant that is formed in the atmosphere by
- 8 chemical reactions between oxides of nitrogen (NO_x) and reactive organic gases
- 9 (ROG).
- 10 Criteria air pollutants are classified in each air basin, county, or in some cases, within a
- 11 specific urbanized area. The classification is determined by comparing actual
- monitoring data with State and Federal standards. If a pollutant concentration is lower
- than the standard, the area is classified as "attainment" for that pollutant and if an area
- 14 exceeds the standard, the area is classified as "non attainment" for that pollutant. If
- 15 there are not enough data available to determine whether the standard is exceeded in
- an area, the area is designated "unclassified."
- 17 The Bay Area Air Basin (Basin) is classified as non-attainment for State PM₁₀ and PM_{2.5}
- 18 standards as well as State 1- and 8-hour ozone standards. With respect to Federal
- 19 standards, the Basin is classified as marginal non-attainment for the 8-hour ozone
- 20 standard. For all other State and Federal criteria air pollutant standards, the Basin is
- 21 classified as either unclassified or as attainment (BAAQMD 2008a).

22 Sensitive Receptors

- 23 For the purposes of air quality and public health analyses, sensitive receptors are
- 24 generally defined as land uses with population concentrations that would be particularly
- 25 susceptible to disturbance from dust, air pollutant concentrations, or other disruptions
- 26 associated with project construction and/or operation. These receptors generally
- 27 include schools, day care centers, hospitals, residential areas, and parks. Some
- 28 receptors are considered more sensitive than others to air pollutants. The reasons for
- 29 greater than average sensitivity include pre-existing health problems, proximity to
- 30 emissions sources, or duration of exposure to air pollutants. Schools, hospitals, and
- 31 convalescent homes are considered to be relatively sensitive to poor air quality because
- 32 children, elderly people, and the infirmed are more susceptible to respiratory distress
- and other air quality-related health problems than the general public. Residential areas

- 1 are considered sensitive to poor air quality because people usually stay home for
- 2 extended periods of time, with associated greater exposure to ambient air quality.
- 3 Recreational uses are also considered sensitive due to the greater exposure to ambient
- 4 air quality conditions because vigorous exercise associated with recreation places a
- 5 high demand on the human respiratory system.
- 6 The Marine Oil Terminal (MOT) is more than one mile northwest of the nearest sensitive
- 7 receptors, which are single-family residences in the unincorporated area of Rodeo. The
- 8 onshore vault is approximately 250 feet from the closest residences in the city of
- 9 Hercules at the Victory-By-The-Bay subdivision, and deconstruction activities at the
- 10 eastern terminus of the onshore pipeline would be within approximately 150 feet from
- 11 the nearest residences at the subdivision.

12 Greenhouse Gas Emissions and Climate Change

- 13 Some gases in the atmosphere affect the earth's heat balance by absorbing infrared
- radiation. These gases can prevent the escape of heat in much the same way as glass
- 15 in a greenhouse. This is often referred to as the "greenhouse effect," and it is
- responsible for maintaining a habitable climate. On earth the gases believed to be most
- 17 responsible for global warming are carbon dioxide (CO₂), methane, nitrous oxide,
- 18 hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Enhancement of the
- 19 greenhouse effect can occur when concentrations of these gases exceed the natural
- 20 concentrations in the atmosphere. Of these gases, CO₂ and methane are emitted in the
- 21 greatest quantities from human activities. Emissions of CO₂ are largely by-products of
- 22 fossil fuel combustion, whereas methane results primarily from off-gasing associated
- 23 with agricultural practices and landfills. CO₂ is the most common reference gas for
- 24 climate change. To account for the warming potential of greenhouse gases (GHG),
- 25 GHG emissions are often quantified and reported as CO₂ equivalents (CO₂E). There is
- 26 international scientific widespread view that human-caused increases in GHGs has and
- 27 will continue to contribute to global warming, although there is much uncertainty
- 28 concerning the magnitude and rate of the warming.
- 29 Some of the potential resulting effects in California of global warming may include loss
- 30 in snow pack, sea level rise, more extreme heat days per year, more high ozone
- 31 concentration days, more large forest fires, and more drought years (CARB 2008).
- 32 Globally, climate change has the potential to impact numerous environmental resources
- 33 through potential, though uncertain, impacts related to future air temperatures and
- 34 precipitation patterns. The projected effects of global warming on weather and climate

- 1 are likely to vary regionally, but are expected to include the following direct effects
- 2 (IPCC 2001):
- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all
 land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.
- 9 Also, there are many secondary effects that are projected to result from global warming,
- 10 including global rise in sea level, impacts to agriculture, changes in disease vectors, and
- 11 changes in habitat and biodiversity. While the possible outcomes and the feedback
- mechanisms involved are not fully understood, and much research remains to be done,
- 13 the potential for substantial environmental, social, and economic consequences over
- 14 the long term may be great.
- 15 The California Energy Commission (CEC) estimated that in 2004, California produced
- 16 492 million gross metric tons of CO₂-equivalent greenhouse gas emissions (CEC 2006).
- 17 The CEC found that transportation is the source of 41 percent of the State's GHG
- 18 emissions; followed by electricity generation at 22 percent, and industrial sources at
- 19 21 percent.

20 Regulatory Setting

- 21 Federal
- 22 The U.S. Environmental Protection Agency (EPA) is responsible for implementing the
- 23 programs established under the Federal Clean Air Act (42 U.S.C 85), such as
- 24 establishing and reviewing the National Ambient Air Quality Standards (NAAQS) and
- 25 judging the adequacy of State Implementation Plans (SIPs). However, the EPA has
- 26 delegated the authority to implement many of the Federal programs to the states, while
- 27 retaining an oversight role to ensure that the programs continue to be implemented.
- 28 State
- 29 The California Air Resources Board (CARB) is responsible for establishing and
- 30 reviewing the State standards, compiling the California SIP, securing approval of that

1 plan from the EPA, and identifying toxic air contaminants. The CARB also regulates 2 mobile sources of emissions in California such as construction equipment, trucks, and 3 automobiles. For example, pursuant to section 2485 of Title 13, Division 3, Chapter 10, 4 Article 1 of the California Code of Regulations, on road vehicles with a gross vehicular weight rating of 10,000 pounds or greater can not idle for longer than five minutes at 5 6 any location. This restriction does not apply when vehicles remain motionless during 7 traffic or when vehicles are queuing. In addition, off road equipment engines, such as 8 dozers, trenchers, etc., can not idle for longer than five minutes per section 2449(d)(3) 9 of Title 13, Division 3, Chapter 9, Article 4.8 of the California Code of Regulations. 10 Exceptions to this rule include: idling when queuing; idling to verify that the vehicle is in 11 safe operating condition; idling for testing, servicing, repairing or diagnostic purposes; 12 idling necessary to accomplish work for which the vehicle was designed (such as 13 operating a crane); idling required to bring the machine to operating temperature as 14 specified by the manufacturer; and idling necessary to ensure safe operation of the 15 vehicle.

- The CARB also oversees the activities of California's air quality management districts, which are organized at the county or regional level. County or regional air quality management districts are primarily responsible for regulating stationary sources at industrial and commercial facilities within their geographic areas and for preparing the air quality plans that are required under the Federal Clean Air Act and California Clean Air Act (Stats. 1988, Ch. 1568).
- 22 Assembly Bill 32 California Global Warming Solutions Act
 - California Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006 (Health and Safety Code section 1. division 25.5), was enacted as legislation in 2006 and requires the CARB to establish a statewide GHG emission cap for 2020 based on 1990 emission levels. AB 32 required CARB to adopt regulations by January 1, 2008, that identify and require selected sectors or categories of emitters of GHGs to report and verify their statewide GHG emissions. The CARB is authorized to enforce compliance with the program that has been developed. Under AB 32, the CARB was also required to adopt, by January 1, 2008, a statewide GHG emissions limit equivalent to the statewide GHG emissions levels in 1990, which must be achieved by 2020. By January 1, 2011, the CARB is required to adopt rules and regulations that shall become operative January 1, 2012, to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 permits the use of market-based compliance mechanisms to achieve those reductions. AB 32 also requires the CARB to monitor

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- 1 compliance with and enforce any rule, regulation, order, emission limitation, emissions
- 2 reduction measure, or market-based compliance mechanism that it adopts.
- 3 Local
- 4 Bay Area Air Quality Management District
- 5 Locally, air quality is regulated by air quality management districts or air pollution control
- 6 districts. The Project site is located in Contra Costa County, which is within the
- 7 jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The BAAQMD
- 8 has produced guidance for evaluating potential air quality impacts of projects. These
- 9 guidance documents are developed so that projects that comply with the requirements
- in the guidance, and do not exceed any thresholds of significance in the guidance, will
- be in conformity with air district air quality plans.
- 12 In December 1999, the BAAQMD adopted its CEQA Guidelines, Assessing the Air
- 13 Quality Impacts of Projects and Plans, as a guidance document to provide lead
- 14 government agencies, consultants, and project proponents with uniform procedures for
- 15 assessing air quality impacts and preparing the air quality sections of environmental
- 16 documents for projects subject to CEQA (BAAQMD 1999). The BAAQMD CEQA
- 17 Guidelines is an advisory document and local jurisdictions are not required to utilize the
- 18 methodology outlined therein. The document describes the criteria that the BAAQMD
- 19 uses when reviewing and commenting on the adequacy of environmental documents. It
- 20 recommends thresholds for use in determining whether projects would have significant
- 21 adverse environmental impacts, identifies methodologies for predicting project
- 22 emissions and impacts, and identifies measures that can be used to avoid or reduce air
- 23 quality impacts.
- 24 The Federal Clean Air Act and the California Clean Air Act require plans to be
- 25 developed for areas designated as nonattainment (with the exception of areas
- 26 designated as nonattainment for the State PM₁₀ standard). The BAAQMD is preparing
- 27 the 2009 Bay Area Clean Air Plan, which will replace the existing Bay Area 2005 Ozone
- 28 Strategy. This plan will include ozone control measures and will also consider the
- 29 impacts of these control measures on particulate matter, air toxics, and GHGs in a
- 30 single, integrated plan (BAAQMD 2008a). However, until the new plan is published, the
- 31 Bay Area 2005 Ozone Strategy is the applicable air quality plan for the Project study
- 32 area.

- 1 In addition, the BAAQMD has adopted rules designed to preserve air quality and protect
- 2 public health (BAAQMD 2008b). At least one of the rules (Regulation 11, Rule 2,
- 3 Asbestos Demolition, Renovation, and Manufacturing) would apply to the proposed
- 4 Project. Regulation 11, Rule 2 limits emissions of asbestos to the atmosphere during
- 5 demolition, renovation, milling, and manufacturing and establishes appropriate waste
- 6 disposal procedures for such activities.
- 7 City of Hercules

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- 8 The Open Space/Conservation Element of the City of Hercules' General Plan includes
- 9 policies and programs related to management of air quality throughout the city (City of
- 10 Hercules 1998). The following program identified in the Open Space/Conservation
- 11 Element may be applicable to the proposed Project:
- 12 Program 11b.1: Implement a dust abatement program for new development including the following dust control measures:
 - Sprinkle all construction areas with water (recycled when possible) at least twice a day, during excavation and other ground-preparing operations, to reduce fugitive dust emissions. Wetting could reduce particulate (dust) emissions by up to 50 percent.
 - Cover stockpiles of sand, soil, and similar materials, or surround them with windbreaks. This measure will substantially reduce wind erosion of stockpiled materials during demolition, and construction, reducing the potential of the project to contribute to excessive suspended particulate (dust) concentrations when winds exceed 10 miles per hour.
 - Cover trucks hauling dirt and debris to reduce spillage onto paved surfaces.
 - Post signs that limit vehicle speeds on unpaved roads and over disturbed soils to 10 miles per hour during construction.
 - Use canvas drapes to enclose building floors during application of mineralbased fiber insulation to structural steel frames.
 - Sweep up dirt and debris spilled onto paved surfaces immediately to reduce re-suspension of particulate matter through vehicle movement over those surfaces.
 - Require the construction contractor to designate a person or persons to oversee the implementation of a comprehensive dust control program and to increase watering, as necessary.

- Require construction contractors to maintain and operate construction equipment so as to minimize exhaust emissions. All internal combustion engines shall be kept well-tuned with regular and periodic inspection and maintenance checks to minimize exhaust emissions. During construction, trucks and equipment shall be running only when necessary.
 - Require that construction of large projects be timed to avoid significant periods of overlap.
- 8 Contra Costa County

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- 9 The Conservation Element of the Contra Costa County General Plan includes goals and
- 10 policies that aim to improve local and regional air quality throughout the County (Contra
- 11 Costa County 2005). The following air resources policies may be applicable to the
- 12 proposed Project:
- 13 *Policy 8-103:* When there is a finding that a proposed project might significantly affect air quality, appropriate mitigation measures shall be imposed.
- 15 *Policy 8-104:* Proposed projects shall be reviewed for their potential to generate hazardous air pollutants.

Impact Analysis and Mitigation

- (a) The most recent clean air plan adopted by the BAAQMD is the 2000 Bay Area Clean Air Plan (BAAQMD 2000a), a regional plan that addresses pollutants of concern in the Basin. The plan states that emission-control devices should be installed to control major sources of emissions and that new emission sources must apply for air quality permits. The BAAQMD has also developed the 2005 Bay Area Ozone Strategy (BAAQMD 2006), which explains how the Basin will achieve compliance with the State one-hour air quality standard for ozone as expeditiously as practicable and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. The emission reduction strategies in the 2000 Bay Area Clean Air Plan and the 2005 Bay Area Ozone Strategy were developed, in part, on regional population, housing, and employment projections prepared by the Association of Bay Area Governments (ABAG).
- There would be no long-term operations associated with the proposed Project and the proposed removal of the MOT and related facilities would facilitate no growth of any kind in the Basin. As such, the proposed Project would be consistent with the assumptions contained within the 2000 Bay Area Clean Air Plan and the 2005 Bay Area Ozone Strategy. Impacts would be less than significant. (Class III)

- 1 (b) Deconstruction activities would cause impacts associated with exhaust emissions 2 and fugitive dust. There would be no long-term operations or emissions associated with the proposed Project.
- 4 Impact AIR-1: Temporary Deconstruction Emissions of Criteria Pollutants.
- 5 Project deconstruction activities could result in substantial short-term emissions 6 of criteria pollutants. (Potentially Significant, Class II)
- 7 Exhaust Emissions
- 8 Coscol has not yet defined how it proposes to remove pilings from the MOT. However, it
- 9 has indicated that the pilings would be removed by either cutting them just below the Bay
- 10 mud, or by vibratory extraction. Therefore, emissions associated with two scenarios have
- 11 been estimated, including: Scenario 1, where deconstruction activities include removing
- 12 the pilings by cutting them 2 feet below the Bay mud, and Scenario 2, where
- deconstruction activities include removing the pilings by vibratory extraction.
- 14 Table 3.3.3-1 provides the estimated emissions summary that would be associated with
- 15 the most conservative emissions (i.e., Scenario 2) for the proposed Project. All
- 16 assumptions associated with the emissions estimates for both deconstruction
- 17 scenarios, including emission factors and identification of anticipated equipment (e.g.,
- 18 cranes, marine vessels, etc.) are summarized in Appendix C.

Table 3.3.3-1. Short-term Deconstruction Criteria Pollutant Emissions for Scenario 2

	Pounds Per Day			Total Tons				
Emission Sources	NO _x	ROG	PM ₁₀	PM _{2.5}	NO _x	ROG	PM ₁₀	PM _{2.5}
Off-Road Equipment	743.5	164.5	26.5	26.5	9.3	2.1	0.3	0.3
Marine Vessels	1757.5	254.7	101.9	101.9	22.4	1.7	1.3	1.3
Vehicle Emissions	69.5	3.6	152.0	71.0	0.8	0.0	1.8	0.5
Total	2,570.5	422.8	280.4	200.4	32.5	3.8	3.4	2.1

Source: Pacific Refining 2008.

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Criteria pollutant emissions of ROG and NO_X from these emission sources would incrementally add to the regional atmospheric loading of ozone precursors. The BAAQMD recognizes that construction equipment emits ozone precursors, but indicates that such emissions are included in the emissions inventory that serves as the basis for regional air quality plans. Coscol would implement APM-3 to keep construction equipment in good

- 1 working order and in compliance with emission regulations. Therefore, construction
- 2 equipment exhaust emissions are not considered significant by the BAAQMD (BAAQMD
- 3 1999).
- 4 Fugitive Dust Emissions
- 5 Onshore Project activities associated with the abandonment of the vault and pipeline
- 6 could generate large quantities of dust on a temporary basis due to ground disturbance
- 7 and from dump trucks and other off-road equipment transporting construction debris at
- 8 the onshore vault and contractors shore base. However, the BAAQMD's approach to
- 9 analysis of construction dust impacts is to emphasize implementation of effective and
- 10 comprehensive dust control measures rather than prepare a detailed quantification of
- 11 emissions (BAAQMD 1999). The BAAQMD considers construction related impacts of
- 12 proposed projects to be less than significant if recommended dust-control measures are
- 13 implemented.

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Mitigation Measure for Impact AIR-1:

- 15 **MM AIR-1. Fugitive Dust Control Plan.** Coscol shall require its construction contractor(s) to implement a dust control plan for the pipeline and vault abandonment activities, as well as for all on-road transport of soil and demolition debris at the contractor's onshore base, that shall include the following dust control procedures as recommended by the BAAQMD:
 - Water all active construction areas at least twice daily.
 - Cover all trucks hauling soil, sand, and other loose materials or require trucks to maintain at least 2 feet of freeboard.
 - Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on unpaved access roads, parking areas and staging areas at construction sites.
 - Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
 - Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

1 Rationale for Mitigation

- 2 Implementation of MM AIR-1 would ensure that impacts associated with short-term fugitive
- 3 dust would be mitigated to a less than significant level.
- 4 (c) The BAAQMD CEQA Guidelines set forth a methodology to evaluate cumulative 5 impacts (BAAQMD 1999). For any project that does not individually have significant air quality impacts, the determination of a significant cumulative impact 6 7 should be based on an evaluation of the consistency of the project with the local 8 general plan and of the general plan with the regional air quality plan. 9 demonstrated above, the proposed Project would be consistent with the adopted 10 clean air plan and the Ozone Strategy and would not result in an operational air quality impact. In addition, the proposed Project would be consistent with the air 11 quality policies in Contra Costa County and the City of Hercules General Plans. 12 As such, the proposed Project would not result in a significant cumulative impact. 13 14 Cumulative impacts associated with criteria pollutants would be less than 15 significant. (Class III)
- Deconstruction activities for the entire Project would be expected to last for up to 5-½ months. Because of the short construction period and the fact that much of the activity and associated emissions would occur offshore more than 1 mile from the nearest residential receptor, operation of the proposed Project would not expose sensitive receptors to substantial concentrations of criteria pollutants. (Class III)
- In addition to the criteria pollutants, toxic air contaminants (TACs) would be generated by the use of diesel fueled construction equipment. Diesel particulate matter (DPM) can be carcinogenic over long exposure durations (e.g., many years). However, nearby receptors would be exposed to construction emissions for only a portion of the short 5-½-month construction period. Consequently, DPM impacts on sensitive receptors would be less than significant. (Class III)
- 28 Impact AIR-2: Demolition of Asbestos-Containing Material.
- Project deconstruction activities could expose sensitive receptors to asbestos. (Potentially Significant, Class II)
- 31 Building materials produced prior to 1980 often contain asbestos. On a recent site visit,
- 32 asbestos-containing materials were thought to have been visually identified at the MOT
- 33 (ESA 2008). Airborne asbestos fibers pose a serious health threat. The demolition,
- 34 renovation, or removal of asbestos-containing building materials is subject to the
- 35 limitations of BAAQMD Regulation 11, Rule 2, Hazardous Materials, Asbestos Demolition,
- 36 Renovation and Manufacturing. As identified in Section 2.5, Environmental Compliance
- 37 Inspection and Mitigation Monitoring Proposed by Applicant, Coscol intends to conduct

- 1 pre-construction surveys for asbestos-containing material associated with the MOT and
- 2 remediate any such materials prior to the start of deconstruction activities (see **APM-5**).
- 3 However, to ensure that asbestos-containing materials are remediated under the oversight
- 4 of the BAAQMD, the BAAQMD's Enforcement Division should be consulted prior to
- 5 commencing deconstruction activities of asbestos-containing building materials.
- 6 <u>Mitigation Measure for Impact AIR-2:</u>
- 7 MM AIR-2. Consult with BAAQMD Regarding Asbestos-Containing Materials.
- Coscol shall require its deconstruction contractor(s) to consult with the
 Bay Area Air Quality Management District (BAAQMD) to ensure that it
 properly complies with the requirements of the BAAQMD's Regulation 11,
 Rule 2, regarding testing and remediation of asbestos-containing
 materials. Prior to deconstruction activities, Coscol shall provide
 documentation to the CSLC that shows that the BAAQMD concurs with
 the contractor(s) sampling and remediation approach.
 - Rationale for Mitigation

- 16 Implementation of MM AIR-2 would ensure that impacts associated with exposure of
- 17 sensitive receptors to asbestos-containing materials would be mitigated to a less than
- 18 significant level by requiring Coscol to consult with the BAAQMD regarding asbestos
- 19 testing and remediation and implement all requirements.
- 20 (e) Deconstruction of the proposed Project could conceivably generate odors from 21 the combustion of fuels. However, Project activities would primarily take place in 22 an open area on the San Pablo Bay where any odors would be dispersed and 23 onshore deconstruction activities would occur for no longer than one week.
- Therefore, impacts would be less than significant. (Class III)
- 25 (f) The proposed Project includes the deconstruction of the existing MOT and abandonment of the associated onshore vault and pipeline. There would be no long-term operations or associated GHG emissions associated with the Project.
- Therefore, no long-term impacts would occur.

Impact AIR-3: Increase in Greenhouse Gas Emissions

The proposed Project would produce short-term greenhouse gas emissions and contribute to climate change (Potentially Significant, Class II).

With regard to the proposed short-term deconstruction activities, emissions associated with two scenarios have been estimated, including: Scenario 1, where deconstruction activities include removing the pilings by cutting them 2 feet below the Bay mud, and Scenario 2, where deconstruction activities include removing the pilings by vibratory extraction. Under Scenario 1, total GHG emissions for equipment, marine vehicles, and motor vehicles are estimated to total approximately 3,576 metric tons of CO₂E during the Project. Under Scenario 2, total GHG emissions for equipment, marine vessels, and motor vehicles are estimated to total approximately 3,828 metric tons of CO₂E. To be conservative, it is assumed that Scenario 2 would be implemented because it would result in higher emissions. GHG emission estimates for Scenario 2 are presented below in Table 3.3.3-2. (See Appendix C for all assumptions and emissions factors associated with the GHG emission estimates for Scenarios 1 and 2.)

Table 3.3.3-2. Short-term Deconstruction GHG Emissions for Scenario 2

	Metric Tons						
Emission Sources	CO ₂	CH₄	N ₂ O	Total CO₂E			
Construction Equipment	320	0.045	0.0032	322			
Marine Vessels	3,300	0.44	0.032	3,319			
Vehicles	180	0.02	0.02	187			
Scenario 2 Total	3,800	0.505	0.0552	3,828			

Source: Pacific Refining 2008.

While the goal of AB 32 is to reduce in-State GHG emissions to 1990 levels by the year 2020, there is no clear metric that would determine if a single project advances toward or away from this goal. There are no adopted rules or regulations from the CARB, State Clearinghouse, BAAQMD, or other resource agency applicable to the proposed Project that define a "significant" source or amount of GHG emissions from construction (or in this case deconstruction) projects, and there are no applicable specific GHG emission limits or caps.

25 limits or caps.

Although an individual project does not generate enough GHG emissions to significantly influence global climate change, global climate change is a cumulative impact and an individual project can contribute to the cumulative impact through its incremental

- 1 contribution combined with the cumulative increase of all other sources of GHG
- 2 emissions. The Project's emissions would result in a net increase in GHG emissions
- 3 potentially conflicting with the State goal of reducing GHG emissions in California to
- 4 1990 levels by 2020. Therefore, mitigation is recommended to reduce this significant
- 5 impact.

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Mitigation Measure for Impact AIR-3:

7 MM AIR-3. **GHG Emission Offset Program.** Prior to the start of construction, 8 Coscol shall purchase carbon offset credits from the California Climate 9 Action Registry (CCAR) or any source that is approved by the CSLC and 10 that is consistent with the policies and guidelines of the California Global 11 Warming Solution Act of 2006 (AB 32) to offset the 3,828 metric tons of 12 greenhouse gas emissions generated during deconstruction activities. 13 The amount of greenhouse gas emissions to be offset may vary 14 depending on if any of the deconstruction plans are modified. Within 15 60 days of completion of the proposed Project, Coscol shall submit a 16 report for the CSLC's review and approval, which shall identify all 17 construction-related emissions and the offsets that were purchased from 18 approved programs that resulted in a zero net increase in emissions from 19 the Project construction.

Rationale for Mitigation

- 21 Deconstruction of the oil terminal and on-shore facilities would result in the temporary
- 22 generation of GHG emissions. By effective participation in an emissions offset program,
- these emissions would be offset, assuring that impacts related to GHG emissions would
- 24 be less than significant.